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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,802	10/12/2001	Tuomo Syvanne	BER-022	2443

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RONALD CRAIG FISH, A LAW CORPORATION
PO BOX 820
LOS GATOS, CA 95032

EXAMINER

ZAND, KAMBIZ

ART UNIT PAPER NUMBER

2132

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/976,802

Applicant(s)

SYVANNE ET AL.

Examiner

Kambiz Zand

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8 and 11-32 is/are rejected.
7) ☒ Claim(s) 9 and 10 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 12 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



KAMBIZ ZAND
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this section can be found in the prior office action.
2. The prior office actions are incorporated herein by reference. In particular, the observations with respect to claim language, and response to previously presented arguments.
3. Claims 1-32 have been amended.
4. Claims 1-32 are pending.
5. Examiner withdraws objection to the drawings and specification as the figures 1-3 do disclose the Prior Art Labels.
6. Examiner withdraws rejection of claims 2 and 6 under 35 U.S.C 112-second paragraphs due to correction by the applicant.

Response to Arguments

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

8. **Claims 18, 20, 24 and 27** are objected to because of the following informalities: typo error.

Claim 18:

- Line 3 "1wherein".

Claim 20: Line 9 "secnd".

Claim 24:

- Line 3 "(913)".

Claim 27:

- Line 3 "informsaid".

Please check the entire applications for possible typo error such as above.

Claim Rejections - 35 USC § 102

9. **Claims 1-6, 11-14 and 17-31** are rejected under 35 U.S.C. 102(e) as being anticipated by Slaughter et al (6,014,669 A).

As per claims 1, 19 Slaughter et al (6,014,669 A) teach a method, computer readable medium stored thereon computer-readable instructions for synchronizing state information in a security gateway cluster (see abstract), said security gateway cluster comprising at least two nodes (see abstract; fig.1 and associated text; col.3, lines 38-40;48-50), said method comprising the step of: storing state information in a first node and in at least a second node of said at least two nodes in said security gateway cluster

(see col.3, lines 61-67; col.4, lines 1-33); upon occurrence of a predetermined irregularly occurring action (col.4, lines 48-53;58-67), synchronizing state information in said security gateway cluster by sending state information from said first node to at least said second node of said at least two nodes (see col.6, lines 28-67; fig.1-3 and associated text), detecting in said security gateway cluster a predetermined irregularly occurring action, and initiating said step of synchronization of state information as a response to said predetermined irregularly occurring action (see col.3-7). Also see the entire reference for more detailed.

As per claim 2 Slaughter et al (6,014,669 A) teach a method according to claim 1, wherein said predetermined action is modification of state information stored in said first node (see col.4, lines 54-67; col.5, lines 1-15).

As per claim 3 Slaughter et al (6,014,669 A) teach a method according to claim 2, wherein in said the step of synchronizing state information only a modified part of said state information stored in said first node is sent (see col.6, lines 25-67).

As per claim 4 Slaughter et al (6,014,669 A) teach a method according to claim 3, wherein the modified part of the state information is sent from said first node to all other nodes of said security gateway cluster (see col.4, lines 54-67; col.5, lines 1-42; col.6, lines 25-67).

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As per claim 5 Slaughter et al (6,014,669 A) teach a method according to claim 4, wherein the modified part of the state information relates to a certain protocol, authentication information, virtual private network parameters or intrusion detection system (see col.4, lines 3-67).

As per claim 6 Slaughter et al (6,014,669 A) teach a method according to claim 1, wherein the step of synchronizing state information all state information stored in said first node is sent (see col.4; col.6, lines 25-67).

As per claim 7 Slaughter et al (6,014,669 A) teach a method according to claim 1, wherein it further comprises the step of: synchronizing state information from said first node to at least a second node (see col.6 where synchronization may be between any nodes).

As per claim 11 Slaughter et al (6,014,669 A) teach a method according to claim 1, wherein said predetermined irregularly occurring action is said first node failing to continue normal operation (see col.5, lines 63-67; col.6, lines 1-67).

As per claim 12 Slaughter et al (6,014,669 A) teach a method according to claim 1, wherein said predetermined irregularly occurring action is said second node requesting state information (see col.5, lines 45-67; col.6).

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As per claim 13 Slaughter et al (6,014,669 A) teach a method according to claim 1, wherein said predetermined irregularly occurring action is said first node initiating a transition to offline state (see col.8, lines 38-47).

As per claim 14 Slaughter et al (6,014,669 A) teach a method according to claim 1, wherein said predetermined irregularly occurring action is handling of data packets relating to a communication session in at least two nodes, one of them being said first node, and in that said synchronization of state information is performed between at least said at least two nodes (see col.4-6 and in the light of TCP/IP on col.7 and 8 which packet handling is inherent part of it).

As per claim 17 Slaughter et al (6,014,669 A) teach a method according to claim 1, further comprising the step of: delaying sending of a plurality of data packets from said first node until said synchronization of state information is performed (see col.7-8; col.4-6).

As per claims 8, 18 and 32 Slaughter et al (6,014,669 A) teach a method according to claims 1 and 31 wherein said irregularly occurring action is the failure of a node, and wherein said step of storing state information in said first node comprises storing both common state information and node-specific state information in said first node (col.4, lines 3-col.6), and further comprising the steps of;

Defining one or more backup nodes for said first node in a security gateway cluster (see col.5, lines 34-45);

Upon detection of failure of said first node, initiating state information synchronization and synchronizing said common state information with all other nodes in said security gateway cluster and synchronizing node-specific state information of said first node with said one or more backup nodes for said first node (see col.5, lines 39-67; col.6).

As per claim 20 Slaughter et al (6,014,669 A) teach a first node in a security gateway cluster, said first node comprising a processor programmed with the following software components:

program code means for processing data packets, program code means for storing state information of said node, and program code means for synchronizing said state information with at least a second software entity controlling operations of a processor on a second node of said security gateway cluster, program code means for receiving from said second software entity instructions to initiate synchronizing said state information, and wherein said program code means for synchronizing said state information are arranged to initiate synchronization as a response to receipt of instructions to initiate synchronization (as applied to claim 1 above; col.3-8).

As per claim 21 Slaughter et al (6,014,669 A) teach a first node according to claim 20, further comprising; program code means for causing a data packet to be delayed until

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an initiated state information synchronization is complete (see col.5, 7-8).

As per claim 22 Slaughter et al (6,014,669 A) teach a first node according to claim 21, wherein said program code means for causing a data packet to be delayed are arranged to delay said data packet until state information is transferred from said node to said second node (see col.5, 7-8).

As per claim 23 Slaughter et al (6,014,669 A) teach a first node according to claim 21, wherein said program code means for causing a data packet to be delayed are arranged to inform said second software entity when an initiated state information synchronization is complete (see col.5-8).

As per claim 24 Slaughter et al (6,014,669 A) teach a first node according to claim 20, further comprising; program code means for receiving instructions to modify said state information from a second software entity residing in a same node as said first software entity (see col.6-8 and 5).

As per claim 25 Slaughter et al (6,014,669 A) teach a second node in a security gateway cluster, said second node comprising; a processor programmed with the following software components; program code means for monitoring data packets relating to certain communication protocol connections, program code means for delivering to a first node in said security gateway cluster instructions to initiate

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synchronizing state information between said first and second nodes (as applied to claim 1 above in the light of col.7-8 TCP/IP packet handling).

As per claim 26 Slaughter et al (6,014,669 A) teach a second node according to claim 25, further comprising; program code means for causing a data packet to be delayed until an initiated state information synchronization is complete (see col.5,7,8).

As per claim 27 Slaughter et al (6,014,669 A) teach a second node according to claim 26, wherein said program code means for causing a data packet to be delayed are arranged to be informed by said first node to delay a data packet (see col.5-7).

As per claim 28 Slaughter et al (6,014,669 A) teach a second node according to claim 26, wherein said program code means for causing a data packet to be delayed are arranged to be informed by said first node, when an initiated state information synchronization is complete, and subsequently trigger delivery of said data packet to said first node (see col.5-8).

As per claim 29 Slaughter et al (6,014,669 A) teach a second node according to claim 25, further comprising; program code means for delivering to said first node instructions to modify state information comprising information about connections (see col.4-6).

As per claim 30 Slaughter et al (6,014,669 A) teach a node of a security gateway

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cluster comprising means for storing state information of said node, and means for, upon occurrence of an irregularly occurring action, synchronizing said state information with at least one other node of said security gateway cluster, means for detecting a predetermined irregularly occurring action, and means for initiating synchronization of said state information as a response to said irregularly occurring action (as applied to claim 1 above in light of col.3, lines 48-50 where number of node may be less than the example of reference four node such as one node).

As per claim 31 Slaughter et al (6,014,669 A) teach a security gateway cluster having a plurality of nodes, at least one node comprising means for storing state information of said node, and means, upon occurrence of an irregularly occurring action, for synchronizing said state information with at least one other node of said security gateway cluster, means for detecting a predetermined irregularly occurring action, and means for initiating synchronization of said state information as a response to said action (as applied to claim 1 above).

Claim Rejections - 35 USC § 103

10. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slaughter et al (6,014,669 A) in view of Applicant Prior Art Admittance (AAPA).

As per claims 15 and 16 Slaughter et al (6,014,669 A) teach a method according to claim 1, characterized in that said predetermined action is a receipt of a data packet in said first node of said security gateway cluster as applied to claim 1 above but do not explicitly disclose, said data packet relating to a command to open a new connection via said security gateway cluster; delaying sending of said data packet from said first node until said synchronization of state information is performed. However page 5, lines 17-24 of the specification disclose periodic synchronization as Prior Art where in order to that a new channel or connection is being set up. Therefore it would have been obvious to one of ordinary skilled in the art to periodically synchronize the departing packets from one node to another in order to update the data structures entries (page 5, lines 21-24).

Allowable Subject Matter

11. **Claims 9 and 10** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Please see enclosed PTO-892.

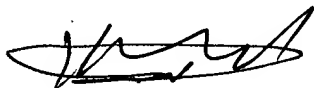
13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kambiz Zand whose telephone number is (571) 272-3811. The examiner can normally be reached on Monday-Thursday (8:00-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone numbers for the organization where this application or proceeding is assigned are 571-272-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR

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or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KAMBIZ ZAND
PRIMARY EXAMINER

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